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**United States Patent [19]**  
Sakagawa

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[54] **SYSTEM FOR SERVER OBTAINING TERMINAL ADDRESS VIA SEARCHING ADDRESS TABLE OR VIA BROADCASTING TO ALL TERMINALS THROUGH EXCHANGE IN RESPONSE TO TERMINAL ADDRESS INTERROGATION REQUEST**

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[30] **Foreign Application Priority Data**

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Jul. 5, 1994 [JP] Japan ..... 6-153381

**ABSTRACT**

[51] Int. Cl.<sup>6</sup> ..... **G06F 12/02**

A originating terminal sends an ATM address interrogation request to a server if the ATM address of another party's terminal is unknown at the time of communication. Upon receiving the ATM address interrogation request from the terminal, the server refers to an ATM address table, searches the table for an ATM address corresponding to a protocol address contained in the interrogation request and notifies the originating terminal of this ATM address. If an ATM address corresponding to the protocol address has not been registered in the ATM address table, the server transfers (broadcasts) the ATM address interrogation request to all terminals. The server notifies the originating terminal of an ATM address obtained by an answer in response to this interrogation request and registers the ATM address in the ATM address table.

[52] U.S. Cl. ..... **395/200.33; 395/412; 395/823**

**15 Claims, 22 Drawing Sheets**

[58] Field of Search ..... **364/200; 340/825.52; 370/60.1, 60, 94.1, 94.3; 178/2 R; 395/200.33, 412, 823**

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